CLIPPEDIMAGE= JP405055842A

PAT-NO: JP405055842A

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TITLE: SEMICONDUCTOR DEVICE

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INVENTOR-INFORMATION:

NAME

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NAME

COUNTRY N/A

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INT-CL (IPC): H03F003/45; H03F003/343

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## ABSTRACT:

PURPOSE: To improve the generality of a semiconductor device including an - operational amplifier by allowing a user to set up several characteristics for the operational amplifier built in the semiconductor device by means of a program.

CONSTITUTION: The operational amplifier is provided with plural constant current sources 109, 110, plural PMOS switches 111, 112 for turning on/off the constant current sources 109, 110 and plural constant current source selecting registers 113, 114 for applying signals to the switches 111, 112. When '1' and '0' are written in the registers 113, 114, the switches 111, 112 are turned on and off and the level of a current supplied to an output stage is changed. Thereby the reduction of the current to the output stage suppresses the power consumption of the operational amplifier, and when the current is increased, the response speed or driving capacity of the amplifier can be improved.